



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D5577-1
Job Sheet 173988

Accounting Job RD17-1046-01



Part No: D5577-1

Job Qty: 2 ea

Part Name: U-Channel, Cable Cutter



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 3/8/18

Job Tracking No:

Due Date: 3/30/18

Created By: Michelle Gagnon-Donovan

Type: R+D

Description:

Note: TBD Dwg. D5577 Rev.A IPP Rev.A New issue 18/03/07 verified by:DP

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	2 Ea		3/29/18	0.00	0.00	Start Up Machining-1		DAS
110	Mill Conv	2 pcs		3/30/18	0.00	2.00	Mill Conv 2		OR 18-03-22
120	QC	2 pcs		3/30/18	0.00	0.00	QC2 Machining-1		9-89
130	QC	2 pcs		3/30/18	0.00	0.00	QC8 Machining-1		18-03-22
135	Outsource	2 pcs		3/30/18	0.00	0.00	Outsource4	P0039408	18-03-23 M18/4/1
140	Packaging	2 pcs		3/30/18	0.00	0.00	Packaging2	DAS	18-03-23
150	QC	2 pcs		3/30/18	0.00	0.00	QC6	11	18-03-23
180	Packaging	2 pcs		3/30/18	0.00	0.00	Packaging3-1	9-89 cckof	9-89
190	QC21-SA	2 Ea		3/30/18	0.00	0.00	QC21		18/04/20

Part Op 110 - 1-Machine as per DWG REV: _____ 2- deburr and break all sharp edges

Descriptions: 120 - QC2- Inspect parts off machine FAI/FAIB

130 - QC8- Inspect parts - second check

135 - Issue P/O to ATG : _____ 1- Anodize Black per MIL-A-8625, Type II, Class 2 as per Dwg. D5577 2- Prime Grey as per Dwg. Certification of Conformity is required.

140 - Certification of Conformity is required.

180 - Identify as per dwg & Stock Location: _____

190 - QC21- Final Inspection - Work Order Release

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M7075T6S1.000X2.500	7075-T6S Sheet 1" Thick Plate X 2.5" Wide	3.0840 ft (1.542 ea)	90-Start up Operation	M137960

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	M7075T6S1.000X2.500	3	13	0

Part Specifications

Specifications could not be found.

Plex 3/8/18 1:33 PM Dart.Gagnon.Michelle



Container No: S054105



Part: D5577-1

Job No: 173988

Serial No/Batch: S054105

Revision: A

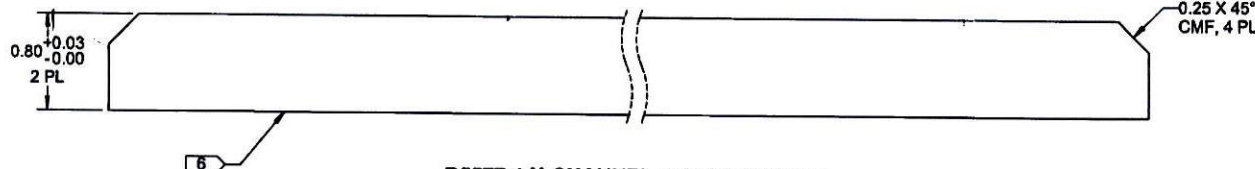
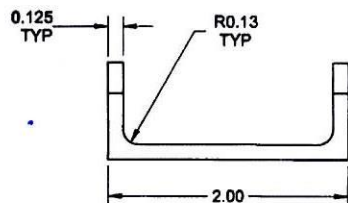
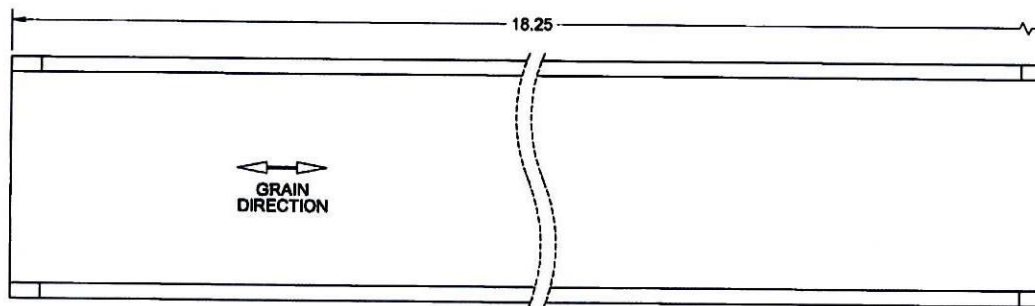
Inspector:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-6200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 03/22/18

SHOP COPY
RETURN TO
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UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE

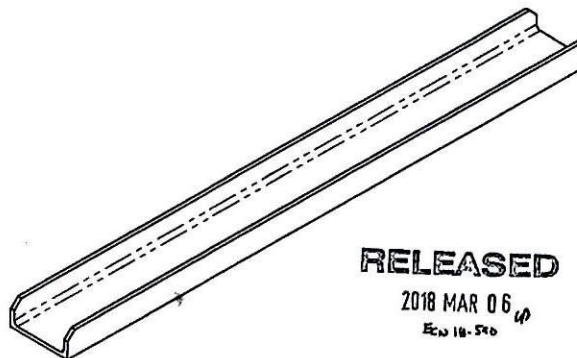
WORK ORDER
NO. 173988
MAR 08 2018



D5577-1 U-CHANNEL, CABLE CUTTER

NOTES:

- 1) MATERIAL: 7075-T6 (OR T651/T6510/T6511/T62) ALUMINUM BAR
PER AMS-QQ-A-225/9 (OR AMS 4122/4123/4186/4187) OR
PER AMS-QQ-A-200/11
REF DART SPEC M7075T6B
- 2) FINISH: ANODIZE PER MIL-A-8625, TYPE II, CLASS 2, COLOR = BLACK
PRIME GREY PER QSI 005, 4.2.1.3.2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044, 6.1
- 7) WEIGHT: 0.78 lbs



RELEASED

2018 MAR 06
E-18-576

APPROVED

A		NEW ISSUE		DESCRIPTION		AJS	17.10.24
REV.						BY	DATE
DESIGN		AJS		DART AEROSPACE USA, INC. EUGENE, OR			
DRAWN		RF					
CHECKED		VS		DRAWING NO.			REV. A
MFG. APPR.		JFS		D5577			SHEET 1 OF 1
APPROVED		HS		TITLE			SCALE
DE APPR.		CP		U-CHANNEL, CABLE CUTTER			NTS
DATE				17.10.24			

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NOT TO BE USED FOR ANY PURPOSE OR COPIES OR COMMUNICATED TO ANY OTHER PERSON WITHOUT
WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO039408**

Supplier: ATG001-VC
A.T.G. Industries Inc
731 INDUSTRIELLE ROAD
ROCKLAND
ON
K4K 1T2 Canada
Phone: 613-446-4544
Fax: 613-446-4556

Attention: Lalande, Marc-Andre

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO039408
PO Date: 3/23/18
Due Date: 4/20/18
Purchase Order Revision:
Revision Date:
Ship-To Contact: Tsimiklis, ChrisoulaPhone:

Via: Ground
Pymt Terms: Net 30
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	174171	D5589-1	Gusset, Outboard LH Issue P/O to ATG : _____ 1- Anodize Black per MIL-A-8625, Type II, Class 2 as per Dwg. D5589 2- Prime Grey as per Dwg. Certification of Conformity is required.	Firmed	4/19/18	2 pcs	0 pcs	2 pcs	\$12.35/pcs	\$24.70
						12x			AT 18/04/17	
2	174168	D5581-2	Clip, Fwd, RH Issue P/O to ATG : _____ 1- Anodize Black per MIL-A-8625, Type II, Class 2 as per Dwg. D5581 2- Prime Grey as per Dwg. Certification of Conformity is required.	Firmed	4/19/18	2 pcs	0 pcs	2 pcs	\$11.50/pcs	\$23.00
						12x			AT 18/04/17	
3	173983	D5583-1	Radius Block Issue P/O to ATG : _____ 1- Anodize Black per MIL-A-8625, Type II, Class 2 as per Dwg. D5583 2- Prime Grey as per Dwg. Certification of Conformity is required.	Firmed	4/19/18	4 pcs	0 pcs	4 pcs	\$8.85/pcs	\$35.40
						14x			AT 18/04/17	
4	174173	D5590-1	Gusset, Inboard LH Issue P/O to ATG : _____ 1- Anodize Black per MIL-A-8625, Type II, Class 2 as per Dwg. D5590 2- Prime Grey as per Dwg. Certification of Conformity is required.	Firmed	4/19/18	2 pcs	0 pcs	2 pcs	\$12.35/pcs	\$24.70
						12x			AT 18/04/17	

Items										
Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
5	174170	D5581-4	Clip, Aft, RH Issue P/O to ATG : _____ 1- Anodize Black per MIL-A-8625, Type II, Class 2 as per Dwg. D5581 2- Prime Grey as per Dwg. Certification of Conformity is required.	Firmed	4/19/18	2 pcs	0 pcs ✓ 2x	2 pcs	\$11.50/pcs	\$23.00 AT 18/04/17
6	174167	D5581-1	Clip, Fwd, LH Issue P/O to ATG : _____ 1- Anodize Black per MIL-A-8625, Type II, Class 2 as per Dwg. D5581 2- Prime Grey as per Dwg. Certification of Conformity is required.	Firmed	4/19/18	2 pcs	0 pcs ✓ 2x	2 pcs	\$11.50/pcs	\$23.00 AT 18/04/17
7	174169	D5581-3	Clip, Aft, LH Issue P/O to ATG : _____ 1- Anodize Black per MIL-A-8625, Type II, Class 2 as per Dwg. D5581 2- Prime Grey as per Dwg. Certification of Conformity is required.	Firmed	4/19/18	2 pcs	0 pcs ✓ 2x	2 pcs	\$11.50/pcs	\$23.00 AT 18/04/18
8	174172	D5589-2	Gusset, Outboard RH Issue P/O to ATG : _____ 1- Anodize Black per MIL-A-8625, Type II, Class 2 as per Dwg. D5589 2- Prime Grey as per Dwg. Certification of Conformity is required.	Firmed	4/19/18	2 pcs	0 pcs ✓ 2x	2 pcs	\$12.35/pcs	\$24.70 AT 18/04/18
9	174174	D5590-2	Gusset, Inboard RH Issue P/O to ATG : _____ 1- Anodize Black per MIL-A-8625, Type II, Class 2 as per Dwg. D5590 2- Prime Grey as per Dwg. Certification of Conformity is required.	Firmed	4/19/18	2 pcs	0 pcs ✓ 2x	2 pcs	\$12.35/pcs	\$24.70 AT 18/04/17
10	171989	D5572-2	Base Bracket, Lower, Cable Cutter, RH Issue P/O to ATG : _____ Black Anodize & Prime as per Dwg. D5572 Certification of Conformity is required.	Firmed	4/20/18	2 pcs	0 pcs ✓ 2x	2 pcs	\$26.90/pcs	\$53.80 AT 18/04/17
11	173988	D5577-1	U-Channel, Cable Cutter Issue P/O to ATG : _____ 1- Anodize Black per MIL-A-8625, Type II, Class 2 as per Dwg. D5577 2- Prime Grey as per Dwg. Certification of Conformity is required.	Firmed	4/19/18	2 pcs	0 pcs ✓ 2x	2 pcs	\$16.10/pcs	\$32.20 AT 18/04/18

DAS
11
9-89



A.T.G. Industries Inc.
731 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 914919

Date: 12-Apr-18

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

Chrisoula Tsimiklis
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577		Fax: 613 632-1033	
Terms		Ship Via	
		OUR TRUCK	
Quantity	Description		
	Please reference this document's Pack List number on all correspondences regarding this shipment. If you have any questions, please contact us.		
2 ea	Part: D5577-1 U-Channel, Cable Cutter Hard Black Anodize per MIL-A-8625F, Type II, Class 2, . Prime IAW Mil-P-23377 J Type I Class N; 1-2 mil max as per QSI 005 Job: 22783		Rev: A PO: PO039408 Line: 1
2 ea	Part: D5578-1 Shim, Cable Cutter Hard Black Anodize per MIL-A-8625F, Type II, Class 2, . Prime IAW Mil-P-23377 J Type I Class N; 1-2 mil max as per QSI 005 Job: 22784		Rev: A PO: PO039408 Line: 12
2 ea	Part: D5587-1 Stringer, LH Fwd Hard Black Anodize per MIL-A-8625F, Type II, Class 2, . Prime IAW Mil-P-23377 J Type I Class N; 1-2 mil max as per QSI 005 Job: 22789		Rev: A PO: PO039408 Line: 17
2 ea	Part: D5586-1 Stringer, RH Fwd Hard Black Anodize per MIL-A-8625F, Type II, Class 2, . Prime IAW Mil-P-23377 J Type I Class N; 1-2 mil max as per QSI 005 Job: 22790		Rev: A PO: PO039408 Line: 18
2 ea	Part: D5588-1 Stringer, RH Aft Hard Black Anodize per MIL-A-8625F, Type II, Class 2, . Prime IAW Mil-P-23377 J Type I Class N; 1-2 mil max as per QSI 005 Job: 22792		Rev: A PO: PO039408 Line: 2
CERTIFICATE OF CONFORMANCE A.T.G Industries Inc. certifies that all items in this shipment conform to the requirements.			
Made in Canada.			



A.T.G. Industries Inc.
731 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 914919

Date: 12-Apr-18

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

Chrisoula Tsimiklis
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via
		OUR TRUCK
Quantity	Description	
	Date: <u>12/24/2018</u>	
	Certified Signature: <u>[Signature]</u>	
	Receiver Signature: _____	
	A.T.G Industries Inc. is AS9100 Registered and Nadcap Chemical Processing Accredited.	
	Note: This Packing Slip may contain parts that have been PLATED. Items that are plated may be subject to natural tarnishing and it is suggested that they be inspected within 24 hours of receipt.	
	Made in Canada.	

Thursday, July 06, 2017 3:04:02 PM

All amounts are calculated in domestic currency.

All Item ID/GL/WOs All Rec. Employees All Currencies

Grouped by Vendor ID

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date Required Qty	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
VendorID\Vendor Name		VU-MET002	A.M. Castle & Co. (Canada) Inc.- C/O 910720								
PO36711	1		M7075T6S1.000X2.5" f 00		7/6/2017	7/6/2017	12.0000 ✓		0.0000	0	\$0.00
USD	No		7075-T6S Sheet 2.5" f Wide x 1" Thick Plate m137968		12.0000	PLOU01			0.0000	0	
	2		M7075T6S6.000X0.2 f 50		7/6/2017	7/6/2017	24.0000 ✓		0.0000	0	\$0.00
	No		7075-T6S Sheet f 0.25" Wide x 6" Thick Plate m137968		24.0000	PLOU01			0.0000	0	
	3		M7075T6S6.000X1.0 f 00		7/6/2017	7/6/2017	24.0000 ✓		0.0000	0	\$0.00
	No		7075-T6S Sheet 1" f Wide x 6" Thick Plate m137968		24.0000	PLOU01			0.0000	0	
Total Received Quantity:											60.0000
Total Qty to Inspect (PO U/M):											0.0000
Total Reject Quantity:											0.0000
Total Receipt Value:											\$0.00
Total Balance Due Quantity:											0.0000

**Castle Metals®**

A. M. Castle & Co.

PACKING SLIP/
CERTIFICATE OF CONFORMANCE

Page 1 of 2

Shipment No:3322822

Shipment Notice

Ship From: A. M. CASTLE & CO. 2150 ARGENTIA ROAD MISSISSAUGA, ON L5N 2K7 CAN		Sold To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA		Ship To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CAN		Deliver To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA	
Date Shipped 05-JUL-17	F.O.B. ORIGIN	Freight Terms Prepaid		Carrier MANITOULIN		BOL No 3322822-2	

Shipment Details	Final Destination Branch - TOR
-------------------------	---------------------------------------

Order No 4799461	Line No 1	Item No 752188.MO	Description 1.0000.PL.7075.T651.ALUMINUM.US1.48.5000.144.5000 CUT 2SIDED TO 2.5 IN (+ .1250/- .0000 IN) X 144.5 IN (+ .1250/- .0000 IN) - ALUMINUM PLATE SAW SPECIFICATIONS: AMS-QQ-A-250/12				
Purchase Order No 36711		Part Number	Ordered Qty 1.00 PCS			Invoice Qty 1.00 PCS	
Details		ALL PAPERWORK MUST FOLLOW ORDER / CUSTOMER MUST RECEIVE AT TIME OF DELIVERY ALL MATERIAL MUST HAVE IDENTIFYING MARKINGS EX:HEAT #'S Email P/s and certs to: clavoie@dartaero.com END USER: DART AEROSPACE END USE: COMMERCIAL AIRCRAFT PARTS					
Delivery No. 121149096	Mill CONSTELLIUM ROLLED PRODUCTS	Heat Number 	Mech Id	PCS 1	Width (IN)	Length (IN)	Shipped Qty(LBS) 37.6174

These items are controlled by the U.S. Government and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. Government or as otherwise authorized by U.S. law and regulations.

These items are controlled by the U.S. Government and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. Government or as otherwise authorized by U.S. law and regulations.

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Castle Metals®

A. M. Castle & Co.

PACKING SLIP/
CERTIFICATE OF CONFORMANCE

Page 2 of 2

We hereby certify the material covered by this certification conforms in accordance with the above specifications and has been found to meet the applicable requirements for the material, including any specifications forming a part of the description. Test reports are on file subject to examination. All claims for defective material are waived unless made in writing to A.M. Castle & Co. within 60 days of the shipment. Material cut to the correct size, or material cut by the customer cannot be returned for credit.

Reviewed by Authorized Castle Metals Representative:

Date:

Name:

SHIPPED JUL 05 2017

M. Rander



881776

These items are controlled by the U.S. Government and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. Government or as otherwise authorized by U.S. law and regulations.
Date Printed: 05-JUL-2017 03:33:14 PM

**Castle Metals®**

A. M. Castle & Co.

PACKING SLIP/
CERTIFICATE OF CONFORMANCE

Page 1 of 2

Shipment No:3322822

Ship From: A. M. CASTLE & CO. 2150 ARGENTIA ROAD MISSISSAUGA, ON L5N 2K7 CAN		Sold To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA		Ship To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CAN		Deliver To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA	
Date Shipped	F.O.B.	Freight Terms		Carrier		BOL No	
05-JUL-17	ORIGIN	Prepaid		MANITOULIN		3322822-2	

Shipment Details				Final Destination Branch - TOR			
Order No	Line No	Item No	Description				
4799461	3	752188.MO	1.0000.PL.7075.T651.ALUMINUM.US1.48.5000.144.5000 CUT 2SIDED TO 6 IN (+ .1250/- .0000 IN) X 144.5 IN (+ .1250/- .0000 IN) - ALUMINUM PLATE SAW SPECIFICATIONS: AMS-QQ-A-250/12				
Purchase Order No		Part Number		Ordered Qty		Invoice Qty	
36711				2.00 PCS		2.00 PCS	
Details		ALL PAPERWORK MUST FOLLOW ORDER / CUSTOMER MUST RECEIVE AT TIME OF DELIVERY ALL MATERIAL MUST HAVE IDENTIFYING MARKINGS EX:HEAT #'S Email P/s and certs to: clavoie@dartaero.com END USER: DART AEROSPACE END USE: COMMERCIAL AIRCRAFT PARTS					
Delivery No.	Mill	Heat Number	Mech Id	PCS	Width (IN)	Length (IN)	Shipped Qty(LBS)
121149098	CONSTELLIUM ROLLED PRODUCTS			2			180.5636

These items are controlled by the U.S. Government and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. Government or as otherwise authorized by U.S. law and regulations.

We hereby certify the material covered by this certification conforms in accordance with the above specifications and has been found to meet the applicable requirements for the material, including any specifications forming a part of the description.

These items are controlled by the U.S. Government and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. Government or as otherwise authorized by U.S. law and regulations.

Date Printed: 05-JUL-2017 03:33:14 PM



Castle Metals®

A. M. Castle & Co.

**PACKING SLIP/
CERTIFICATE OF CONFORMANCE**

Page 2 of 2

Test reports are on file subject to examination. All claims for defective material are waived unless made in writing to A.M. Castle & Co. within 60 days of the shipment. Material cut to the correct size, or material cut by the customer cannot be returned for credit.

Reviewed by Authorized Castle Metals Representative:

Date:

Name:

SHIPPED JUL 05 2017

M. Rander



SP 17-7-6.

These items are controlled by the U.S. Government and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. Government or as otherwise authorized by U.S. law and regulations.

Date Printed: 05-JUL-2017 03:33:14 PM



Constellium



CERTIFIED TEST REPORT
Constellium Rolled Products
Ravenswood, LLC

S
H
I
P
T
O

A M CASTLE CO
3050 SO HYDRAULIC
WICHITA KS
67216
US

S
O
L
D
T
O

A M CASTLE
1420 KENSINGTON ROAD, SUITE 220
OAK BROOK IL
60523
US

A M CASTLE		110639772		4075		INCLUSION		Serial: 20170527-0110539772		Pg 1 of 4	
CUSTOMER PURCHASE ORDER NO. & ITEM 419757						Constellium ORDER NO. 203735					
ALLOY 7075	CLAD	TEMPER T651	GUAGE 1.00000 in 25.40 mm	WIDTH 48.50000 in 1,232 mm	LENGTH 144.50000 in 3,670 mm		CERTIFICATION "Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination." Constellium Rolled Products Ravenswood, LLC 859 Century Road P.O. BOX 68 RAVENSWOOD, WV 26184 USA  Steve Good - Laboratory Manager				
ITEM ORDERED SPEC PLATE, SAWED MILL FINISH											
CUSTOMER SPECIFICATION AMS 4045K											
PART NUMBER 752188		B/L NUMBER 81388		DATE SHIPPED 05/29/2017							
WT. SHIPPED 5770.000 LB		NO. OF PIECES 000008		GOVT. CONTRACT NO.							

ALL LOTS ON THIS CERTIFICATION ALSO CONFORM TO THE FOLLOWING REQUIREMENTS:

ASTM B594 REV 13 2013 100% SONIC W/ 0.125" DEADZONE Class A
 AMS QQ-A-250/12A
 AMS-STD-2154A 2012 TYPE1 CLASS A 100% SONIC MINUS DEADZONE
 (ASTM B209-14)
 BSS-7055B 2013 CLASS A 100% SONIC TESTED MINUS DEADZONE
 CST1006 REV E 2011 CLASS A 100% SONIC MINUS DEADZONE
 DPS 4.713 REV AK 2012 CLASS A 100% SONIC MINUS DEADZONE
 GAMPS 9101 REV B 2006 CLASS A 100% SONIC MINUS DEADZONE
 PS 21211P 2010 CLASS A 100% SONIC MINUS DEADZONE

Load Details

Package	Net Lbs	Kg	Lot	Piece	Serial	Parent Lot
1001522455	725.000	328.854	9387991	01		
1001522455	725.000	328.854	9387991	02		
1001522455	725.000	328.854	9387991	03		
1001522460	725.000	328.854	9387992	01		
1001522460	725.000	328.854	9387992	02		
1001522460	725.000	328.854	9387992	03		
1001522466	710.000	322.050	9387993	01		
1001522466	710.000	322.050	9387993	02		

Lot: 9387991

DAS
5

Tensile - Room Temperature (US)

Direction	Tests	Ultimate (KSI)		Yield (KSI)		Elongation (%)		Report
		Min	Max	Min	Max	Min	Max	
LT	02	79.8	80.5	70.1	72.3	13.0	13.0	





Constellium



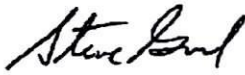
CERTIFIED TEST REPORT
Constellium Rolled Products
Ravenswood, LLC

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A M CASTLE CO
3050 SO HYDRAULIC
WICHITA KS
67216
US

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A M CASTLE
1420 KENSINGTON ROAD, SUITE 220
OAK BROOK IL
60523
US

A M CASTLE		110539772		4075		INCLUSION		Serial:20170527-0110539772		Pg 2of4	
CUSTOMER PURCHASE ORDER NO. & ITEM 419757						Constellium ORDER NO. 203735					
ALLOY 7075	CLAD	TEMPER T651	GAUGE 1.00000 in 25.40 mm	WIDTH 48.50000 in 1.232 mm	LENGTH 144.50000 in 3,670 mm		CERTIFICATION "Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination." Constellium Rolled Products Ravenswood, LLC 859 Century Road P.O. BOX 68 RAVENSWOOD, WV 26164 USA  Steve Good - Laboratory Manager				
ITEM ORDERED SPEC PLATE, SAWED MILL FINISH											
CUSTOMER SPECIFICATION AMS 4045K											
PART NUMBER 752188			B/L NUMBER 81388		DATE SHIPPED 05/29/2017						
WT. SHIPPED 5770.000 LB		NO. OF PIECES 000008		GOVT. CONTRACT NO.							

Tensile - Room Temperature (SI)				Yield (N/MM2)		Elongation (%)		Report
Ultimate (N/MM2)				Min	Max	Min	Max	
Direction	Tests	Min	Max	Min	Max	Min	Max	
LT	02	550	555	483	498	13.0	13.0	

Chemistry (Actual)

	SI	FE	CU	MN	MG	CR	ZN	TI	ZR
Core	0.05	0.16	1.38	0.03	2.48	0.20	5.45	0.04	0.01

OTHERS-EACH: .05 MAX. OTHERS TOTAL: .15 MAX. AL REMAINDER

All material contained in this lot was cast and manufactured in the USA

Lot: 9387992

Tensile - Room Temperature (US)				Yield (KSI)		Elongation (%)		Report
Ultimate (KSI)				Min	Max	Min	Max	
Direction	Tests	Min	Max	Min	Max	Min	Max	
LT	02	80.3	80.6	71.5	72.0	12.5	13.5	





Constellium



CERTIFIED TEST REPORT
Constellium Rolled Products
Ravenswood, LLC

S
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A M CASTLE CO
3050 SO HYDRAULIC
WICHITA KS
67216
US

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A M CASTLE
1420 KENSINGTON ROAD, SUITE 220
OAK BROOK IL
60523
US

A M CASTLE		110539772		4075		INCLUSION		Serial:20170527-0110539772		Pg 3of4	
CUSTOMER PURCHASE ORDER NO. & ITEM 419757						Constellium ORDER NO. 203735					
ALLOY 7075	CLAD	TEMPER T651	GAUGE 1.00000 in 25.40 mm	WIDTH 48.50000 in 1,232 mm	LENGTH 144.50000 in 3,670 mm		CERTIFICATION "Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination." Constellium Rolled Products Ravenswood, LLC 859 Century Road P.O. BOX 68 RAVENSWOOD, WV 26164 USA  Steve Good - Laboratory Manager				
ITEM ORDERED SPEC PLATE, SAWED MILL FINISH											
CUSTOMER SPECIFICATION AMS 4045K											
PART NUMBER 752188		B/L NUMBER 81388		DATE SHIPPED 05/29/2017							
WT. SHIPPED 5770.000 LB		NO. OF PIECES 000008		GOVT. CONTRACT NO.							

Tensile - Room Temperature (SI)								
		Ultimate (N/MM2)		Yield (N/MM2)		Elongation (%)		Report
Direction	Tests	Min	Max	Min	Max	Min	Max	
LT	02	554	558	493	496	12.5	13.5	

Chemistry (Actual)									
	SI	FE	CU	MN	MG	CR	ZN	TI	ZR
Core	0.05	0.16	1.38	0.03	2.48	0.20	5.45	0.04	0.01

OTHERS-EACH: .05 MAX. OTHERS TOTAL: .15 MAX. AL REMAINDER

All material contained in this lot was cast and manufactured in the USA

Lot: 9387993

Tensile - Room Temperature (US)								
		Ultimate (KSI)		Yield (KSI)		Elongation (%)		Report
Direction	Tests	Min	Max	Min	Max	Min	Max	
LT	02	79.9	80.8	70.4	71.5	13.0	13.5	





Constellium



CERTIFIED TEST REPORT
Constellium Rolled Products
Ravenswood, LLC

S
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T
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A M CASTLE CO
3050 SO HYDRAULIC
WICHITA KS
67216
US

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O

A M CASTLE
1420 KENSINGTON ROAD, SUITE 220
OAK BROOK IL
60523
US

A M CASTLE		110539772		4075		INCLUSION		Serial:20170527-0110539772		Pg 4of4	
CUSTOMER PURCHASE ORDER NO. & ITEM 419757						Constellium ORDER NO. 203735					
ALLOY 7075	CLAD	TEMPER T651	GAUGE 1.00000 in 25.40 mm	WIDTH 48.50000 in 1,232 mm	LENGTH 144.50000 in 3,670 mm		CERTIFICATION "Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination." Constellium Rolled Products Ravenswood, LLC 859 Century Road P.O. BOX 68 RAVENSWOOD, WV 26164 USA  Steve Good - Laboratory Manager				
ITEM ORDERED SPEC PLATE, SAWED MILL FINISH											
CUSTOMER SPECIFICATION AMS 4045K											
PART NUMBER 752188		B/L NUMBER 81388		DATE SHIPPED 05/29/2017							
WT. SHIPPED 5770.000 LB		NO. OF PIECES 000008		GOVT. CONTRACT NO.							

Tensile - Room Temperature (SI)								
		Ultimate (N/MM2)		Yield (N/MM2)		Elongation (%)		Report
Direction	Tests	Min	Max	Min	Max	Min	Max	
LT	02	551	557	485	493	13.0	13.5	

Chemistry (Actual)

	SI	FE	CU	MN	MG	CR	ZN	TI	ZR
Core	0.05	0.16	1.38	0.03	2.48	0.20	5.45	0.04	0.01

OTHERS-EACH: .05 MAX. OTHERS TOTAL: .15 MAX. AL REMAINDER

All material contained in this lot was cast and manufactured in the USA

QUALITY TEXTS:
AMC CA-15403 R 8

THIS TEST REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE LABORATORY OR AUTHORIZED QUALITY DELEGATE. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULENT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW.

CHEMISTRY BY DES: ARKSPARK
 CHEMISTRIES REPORTED IN PERCENTAGE BY WEIGHT
 WHEN FRACTURE TOUGHNESS TEST REQUIRED, TESTED PER ASTM E399
 WHEN TENSILE TEST REQUIRED, TESTED PER ASTM E8; 8557
 DUNS Number: 090570149; CAGE Code: 1YW19

Mercury is not a normal contaminant in aluminum alloys and neither mercury nor any of its compounds were utilized in the manufacture of our product.
"END OF CERTIFICATION"



MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M70751651, 100 X 2.500
 DATE: JUL 07 2017

PO / BATCH NO.: 036711/M137908

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 12'
 QUANTITY INSPECTED: 12'
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1"
 THICKNESS RECEIVED: 1"
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y ☒ N	
CORRECT FINISH	☒ Y ☐ N	
CORROSION	Y ☒ N	
CORRECT GRAIN DIRECTION	☒ Y ☐ N	
CORRECT MATERIAL PER M-DRAWING	☒ Y ☐ N	<u>51m B209</u>
CORRECT THICKNESS	☒ Y ☐ N	
PHOTO REQUIRED	Y ☒ N	
CORRECT REF # TO LINK CERT	☒ Y ☐ N	<u>#1 #4387991</u>
CORRECT MATERIAL IDENTIFICATION	☒ Y ☐ N	
CORRECT M# ON THE MATERIAL	☒ Y ☐ N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y ☒ N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y ☒ N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>5</u> DATE: <u>JUL 07 2017</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

△ PURCHASE MATERIAL: 7075-T6/T62/T651 ALUMINUM SHEET OR PLATE

SPECIFICATION: QQ-A-250/12 OR AMS-QQ-A-250/12
OR AMS 4046
OR ASTM B209

OR

△ PURCHASE MATERIAL: 7075-T6/T62/T651 ALCLAD ALUMINUM SHEET OR PLATE

△ SPECIFICATION: QQ-A-250/13 OR AMS-QQ-A-250/13
OR AMS 4048 / 4049
OR ASTM B209

△ PART NUMBER: M7075T6S | TTT | X | W.WWW |
| THK | | WIDTH |

△ WHERE "TTT" = THICKNESS (IN INCHES)
AND "W.WWW" = WIDTH (IN INCHES, OPTIONAL, FOR SPECIFYING CUT PLATE)

EG. 0.063" THICK SHEET = M7075T6S.063
EG. 3.5" WIDE BY 0.500" THICK PLATE = M7075T6S.500X3.500

△ PREFERRED SIZE: .TTT BY 4FT BY 10FT FOR SHEET

RELEASED

2017 JUN 19
ECN 17-574

B	ADD: REF TO "PLATE", "T651" TEMPER, AMS 4048, OPTIONAL WIDTH DIM (CAR16-149)	CP	17.05.05
A	NEW ISSUE	RF	10.11.08
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. M7075T6S REV. B TITLE 7075-T6 SHEET/PLATE SPEC SCALE NTS COPYRIGHT © 2016 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS OR IMPLIED UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED FOR REPRODUCTION WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DRAWN	CP		
CHECKED	ML		
MFG. APPR.	LL		
APPROVED	WM		
DE APPR.	DS		
DATE	17.05.05		

APPROVED



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO36711

Purchase Order Date 6/15/2017

PO Print Date 6/22/2017

Page Number 1 of 4

Order From :

METALUX CASTLE
P.O. BOX 4090 STN A
TORONTO, ONTARIO M5W 0E9
CANADA

VU-MET002

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

REVISED P/N:

Contact Name

Vendor Phone

Ship To Contact

Ship To Phone

Ship Via: Yours ppd

Ship Acct:

Buyer

Customer POID

Customer Tax #

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 30

USD

Destination-Collect

Line Nbr	Reference Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
	Line Comments		Promise Date				
	Delivery Comments						
1	M7075T6S1 000X2 500	7075-T6S Sheet 2.5" Wide x 1" Thick Plate	7/6/2017	FN	12 00	\$30 42	\$365 04
			Yes				
			7/6/2017				

MATERIAL 7075-T6 OR T651/T6510/T6511/T62 ALUMINUM BAR
AS PER AMS-QQ-A-225/9 OR AMS 4122/4123/4186/4187 OR
PER AMS-QQ-A-200/11 OR QQ-A-250/12 CUT FROM PLATE

Line Total: \$365.04

2	M7075T6S6 000X0.250	7075-T6S Sheet 0.25" Wide x 6" Thick Plate	7/6/2017	FN	24 00	\$20 75	\$498.00
			Yes				
			7/6/2017				

MATERIAL 7075-T6 OR T651/T6510/T6511/T62 ALUMINUM BAR
AS PER AMS-QQ-A-225/9 OR AMS 4122/4123/4186/4187 OR
PER AMS-QQ-A-200/11 OR QQ-A-250/12 CUT FROM PLATE

Line Total: \$498.00

Note:

6/22/2017



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO36711

Purchase Order Date 6/15/2017

PO Print Date 6/22/2017

Page Number 2 of 4

Order From :
METAUX CASTLE
P.O. BOX 4090 STN A
TORONTO, ONTARIO M5W OE9
CANADA

VU-MET002

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name
Vendor Phone

Ship To Contact
Ship To Phone
Ship Via:
Ship Acct:

Yours ppd

Buyer
Customer POID
Customer Tax #
Terms
Currency
FOB

Chantal Lavoie
10127-2607
Net 30
USD
Destination-Collect

3	M7075T6S6.000X1.000	7075-T6S Sheet 1" Wide x 6" Thick Plate	7/6/2017	FN	24.00	\$44.25	\$1,062.00
---	---------------------	---	----------	----	-------	---------	------------

MATERIAL 7075-T6 OR T651/T6510/T6511/T62 ALUMINUM BAR
AS PER AMS-QQ-A-225/9 OR AMS 4122/4123/4186/4187 OR
PER AMS-QQ-A-200/11 OR QQ-A-250/12 CUT FROM PLATE

4	M7075T6S7.000X2.000	7075-T6S Sheet 2" Wide x 7" Thick Plate	7/6/2017	FN	18.00	\$88.44	\$1,592.00
---	---------------------	---	----------	----	-------	---------	------------

MATERIAL 7075-T6 OR T651/T6510/T6511/T62 ALUMINUM BAR
AS PER AMS-QQ-A-225/9 OR AMS 4122/4123/4186/4187 OR
PER AMS-QQ-A-200/11 OR QQ-A-250/12 CUT FROM PLATE

Line Total: \$1,062.00

Line Total: \$1,592.00

Note:

6/22/2017



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO36711

Purchase Order Date 6/15/2017

PO Print Date 6/22/2017

Page Number 3 of 4

Order From :

METAUUX CASTLE
P.O. BOX 4090 STN A
TORONTO, ONTARIO M5W OE9
CANADA

VU-MET002

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone

Ship To Contact

Ship To Phone

Ship Via:

Ship Acct:

Yours ppd

Buyer

Customer POID

Customer Tax #

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 30

USD

Destination-Collect

5 M7075173B3 000X4.000 7075-T73 Bar 3.0 x 4.0 grain direction along 3" 7/6/2017

Yes

7/6/2017

MATERIAL: 7075-T6 OR T651/T6510/T6511/T62 ALUMINUM BAR
AS PER AMS-QQ-A-225/9 OR AMS 4122/4123/4186/4187 OR
PER AMS-QQ-A-200/11 OR QQ-A-250/12 CUT FROM PLATE

NOTE CUT 16 PCS AT 13.375", GRAIN DIRECTION ALONG 13.375"

4.00

\$101.00

\$404.00

Line Total:

\$404.00

6 M174PH-H1150R1 000 M174PH-H1150R1 000 6/27/2017

Yes

6/27/2017

MATERIAL: 17-4 PH CONDITION H1150
GRAIN MUST BE ALONG LENGTH OF BAR

12.00

\$21.35

\$256.20

Line Total:

\$256.20

8 D6104-005P 17.4 SS Roundbar 4.00" Od 7/6/2017

Yes

7/6/2017

AS PER DWG D6104 REV B
B162764

MATERIAL: 17-4 PH AS PER AMS 4643 OR AISI 630
SIZE 4.00" X 5.10" LONG

10.00

Each

\$54.20

\$542.00

Note:

6/22/2017



Dart Aerospace Ltd
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO36711

Purchase Order Date 6/15/2017

PO Print Date 6/22/2017

Page Number 4 of 4

Order From :

METAUX CASTLE
P.O. BOX 4090 STN A
TORONTO, ONTARIO M5W OE9
CANADA

VU-MET002

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone

Ship To Contact

Ship To Phone

Ship Via:

Yours ppd

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

USD

FOB

Destination-Collect

Line Total:

\$542.00

9 71401-45

PROCUREMENT
QUALITY CLAUSES

7/6/2017

1.00

\$0.00

\$0.00

No

7/6/2017

Procurement Quality Clauses

A005 right of entry

A012 chemical and physical test report

A016 personnel qualification

A017 raw material identification (as applicable)

A026 certification of material conformance

A041 quality management system

A042 dart notification by supplier

A043 retention of quality documents

Line Total:

\$0.00

PO Total:

\$4,719.24

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation

Change Nbr: 2

Change Date: 6/22/2017